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November 1, 2011

Mr. Allen:

On behalf of the Steering Committee and all Deschutes Collaborative Forest Project (DCFP) stakeholders, I respectfully submit the attached recommendations for consideration in the planning and implementation of projects on the DCFP landscape. These recommendations address two issues of importance to the collaborative group: 1) the restoration of dry mixed-conifer forest types, which cover roughly one quarter of the DCFP landscape and are significantly departed from ecologically resilient conditions and; 2) the restoration of stands infected with ponderosa pine dwarf mistletoe, and in particular stands with infected large and/or old-tree structures.

Over the past seven months members of the DCFP Restoration Planning Sub-committee met eleven times in the process of generating recommendations that fulfill the intent of the Collaborative Forest Landscape Restoration Act to advance "collaborative, science-based ecosystem restoration" that is ecologically, economically, and socially sustainable. The goal of the Sub-committee was to address challenging forest restoration issues at multiple scales and develop recommendations that facilitate the expanded scale and scope of restoration across the broader landscape. In that vein, the Sub-committee utilized the best available science, technical expertise from local researchers, academics, and agency staff, as well as field trips to project areas to gather information and foster the relationships and trust necessary to draft such holistic recommendations.

Three weeks ago the DCFP Steering Committee reviewed and endorsed the recommendations advanced by the Sub-committee. Again, the recommendations were evaluated through the lens of ecological, economic, and social sustainability to ensure they were based on sound science, operationally feasibly, and broadly supported by community stakeholders. I am proud to report that the dry mixed-conifer management recommendations were approved unanimously and the dwarf mistletoe management recommendations were approved with greater than the 2/3 majority required by our decision-making process. Per our agreed-upon collaborative process, I have also attached the minority report submitted to express areas of disagreement with the dwarf mistletoe management recommendations.

I, Phil Chang, and Pete Caligiuri would welcome the opportunity to meet with you and the appropriate leadership to discuss the details and intent of these recommendations further.

Thank you, John, and your leadership team and staff, for the ongoing commitment to the success of the Deschutes Collaborative Forest Project. It is my sincere belief that together we can build a model for restoration today that will make our forests and communities healthier for decades to come.

Sincerely,

Alan Unger

Alan Unger
Chair, DCFP Steering Committee

Cc. Bill Anthony, Sisters Ranger District; Shane Jefferies, Bend-Ft. Rock Ranger District
Attachments: Dry Mixed-Conifer Recommendation: Dwarf Mistletoe Recommendation + Minority Report

Dry Mixed-Conifer Restoration Recommendations

Approved by the Steering Committee, Deschutes Collaborative Forest Project 10/11/11

The following recommendations were produced for three different scales:

1. **Landscape-level**: A clear picture of the scale and scope of the restoration need (at the Deschutes Skyline **landscape-level;** 145,000 acres but with application for the Deschutes NF, 1.6 million acres).
2. **Project-level:** Where restoration can be appropriately and effectively implemented given project values/ needs/ constraints.
3. **Stand-level:** Type of restoration treatments needed to return the forest to a healthy and resilient condition.

1. Landscape-level recommendations represent an ecologically-based approach to forest restoration based on restoring ecological pattern and process in fire-adapted forests towards the **Historic Range of Variability** (HRV). The sub-committee agrees to use **Plant Association Group** (PAG or forest type) and HRV as the basis for guidelines to determine the desired future condition of a healthy and resilient fire-adapted forest across the landscape, with the understanding that HRV goals should be applied at the appropriate scale and will not be met on every acre.

Collaborative Recommendations

Dry Mixed Conifer:
• Manage landscape so resilient to natural processes
• Use HRV to guide understory and overstory species structure and composition goals:
  ○ Maintain and promote legacy structure at densities within HRV
  ○ Manage for diversity on the landscape, including species diversity and structural diversity within the HRV
  ○ Manage for diversity where it appropriately falls or is maintained on landscape (e.g., white fir on north-facing slopes)
  ○ Achieve lower densities of late-seral species (e.g., white fir) where appropriate through larger and/or more group openings to return stands to early-seral dominant forest (e.g., ponderosa pine, Douglas-fir, western larch)
• Recognize over-abundance of “mid-seral closed” stands and focus restoration activities on these stands
• Increase area of forest where conditions allow fire (prescribed or natural start) to be used as a tool to achieve restoration goals
• Provide wildlife core habitats and corridors for wildlife species diversity

Dry Mixed-Conifer Restoration Recommendations

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2. Project-level recommendations integrate the ecologically-based, landscape-level recommendations with **collaborative values** and **public forest management guidelines**. The characteristics of each project-planning area dictate which values, objectives, and constraints warrant consideration at the project-level.

Collaborative Recommendations

Dry Mixed Conifer:
• Put in context of landscape's HRV as measured in % successional stages (structure descriptions based on age and density), tree composition and as seen on the ground by legacy material and evidence of fire
• Ensure successional stages are located in a mosaic to imitate natural disturbance patterns as we currently understand (using best available science)
• Use existing structural and compositional opportunities already present on landscape (enhance openings, choose clumps from dense patches)
• Use fire as appropriate, taking into account other values (ecological, social, health and safety)
• Treatment entries:
  ○ In stands with old-growth trees and characteristics, strive to meet target density to achieve restoration goals with one mechanical entry and maintain with fire or fire surrogate (e.g. mowing)
  ○ In 2nd growth/ black bark stands, look for opportunities to utilize re-entries to meet restoration goals (approximately > 20 years)

3. Stand-level recommendations provide concrete, on-the-ground prescriptions for restoration treatments in stands with specific issues that have had a lack of management agreement within stakeholders in the past.

Such fine-scale guidance is not needed or planned for stand types where there is broad agreement on desired outcomes. However, in certain stand conditions, these recommendations could help increase support for management and help planning teams, silviculturalists, foresters, marking crews, and equipment operators appropriately and efficiently envision, locate, and implement collaborative restoration recommendations.

It is important that stand-level prescriptive recommendations be realistic and operationally feasible.

Collaborative Recommendations

Dry Mixed Conifer:
• Where stand is being managed for restoration goals, utilize multiple tools and guidelines to develop and achieve restoration tree composition and structure goals:
  ○ Promote tree species that are resilient to fire
  ○ Retain dominant ponderosa pine, Douglas-fir, and western larch regardless of spacing to achieve large structures and clumps
  ○ Utilize variable spacing to achieve stand-level “clumpy, gappy, patchy” structure
  ○ Use skips and gaps as defined by best available science to achieve stand-level “clumpy, gappy, patchy” structure and promote/protect dominant species appropriate to historic species composition for dry mixed-conifer PAG (e.g., ponderosa pine, Douglas-fir, and western larch)”
  ○ Plan for and implement ecologically appropriate fire as a restoration tool
  ○ Look for opportunities to increase use of natural and prescribed fire

Ponderosa Pine Dwarf Mistletoe Management and Restoration Recommendations
Approved by the Steering Committee, Deschutes Collaborative Forest Project 10/11/11

The subject of ponderosa pine dwarf mistletoe management [specifically in large trees (defined herein as trees 21"+ dbh)] represents a significant point of contention due to the multiple ecological, social, and economic values associated with large trees. Consequently, the DCFP Restoration Planning Sub-committee prioritized dwarf mistletoe management as an issue to address for a discrete area within the Popper Vegetation Management Project. The purpose of these recommendations is to test the potential to balance multiple objectives and values at the project- and stand-level ***before*** such a proposal is applied across the Deschutes Collaborative Forest landscape and broader Deschutes National Forest.

The following recommendations outline a collaborative strategy that aims to balance the following:

1. Retention of large trees in patches and clumps that are ecologically and socially-valued;
2. Containment of dwarf mistletoe infected large trees in patches and clumps and reduction of dwarf mistletoe levels outside those areas to address forest health concerns;
3. Removal of some large infected trees located in buffers or isolated across stands to further reduce dwarf mistletoe levels and provide economic value.

The table below provides recommendations to address ponderosa pine dwarf mistletoe in the stand structural categories being analyzed by U.S. Forest Service in the Popper NEPA planning process. The DCFP Steering Committee and Restoration Planning Sub-committee would like Forest Service planning staff to take into account historic and current stand-, project-, and landscape-level context when implementing the various elements of these recommendations.

Ponderosa Pine Dwarf Mistletoe Reduction and Containment Recommendations	
Stand Structure	Recommended Treatment
Plantations:	• Retain uninfected trees where they are found in plantations • Utilize sanitation thinning, group selection, and prescribed fire to reduce mistletoe infection levels and control its spread within plantation stand(s) • Thin within plantations to create buffers ("donuts") to separate adjacent heavily infected mistletoe stands and control and prevent mistletoe spread into plantations • Use lower basal area targets within plantations and second-growth stands according to site potential on 10-15% of treatment area to harvest more intermediate sized trees* • Meet average basal area targets within plantations and second growth stands through variable density thinning as prescribed in restoration treatments*
0-3 large TPA:	• Retain uninfected large trees where found; consider strategic pruning of large trees with low dwarf mistletoe infection levels (limited to bottom 1/3 of crown) • Create snags from isolated, large infected trees according to wildlife standards and guidelines as determined by wildlife biologist to reduce mistletoe impact "footprint" • Utilize sanitation thinning, group selection, and prescribed fire in surrounding younger cohort to reduce mistletoe level and control its spread within stand
4-14 large TPA:	• Patch retention (*aggregations of 10+ large trees*): o Retain large trees in patches o Thin from below to remove overtopped, infected understory and

	reduce competitive stress on overstory
	• Clump and buffer (*aggregations of 4-9 large trees*):
	  ○ Retain large trees in clumps (in some cases located around patches)
	  ○ Create buffer around clumps and patches to contain mistletoe and control its spread within surrounding stand(s) by:
	  ▪ Creating snags according to wildlife standards and guidelines as determined by wildlife biologist
	  ▪ Cutting and removing large, infected trees that exceed wildlife requirements
	  ○ Consider limited planting of non-host tree species (e.g., Douglas-fir) as experimental control of dwarf mistletoe spread where site conditions are appropriate
	• Isolated, large infected trees: (*areas with 1-3 dispersed large trees*)
	  ○ Retain uninfected large trees where found; consider strategic pruning of large trees with low dwarf mistletoe infection levels (limited to bottom 1/3 of crown)
	  ○ Create snags according to wildlife standards and guidelines as determined by wildlife biologist to reduce mistletoe impact "footprint"
	  ○ Cut and remove infected large trees that exceed wildlife standards and guidelines for snag density as determined by wildlife biologist

15+ large TPA:	• Retain large, infected overstory trees • Thin from below to remove overtopped, infected understory and reduce competitive stress on overstory

* The DCFP Steering Committee and Restoration Planning Sub-committee supports this restoration recommendation in ponderosa pine plantations and second-growth stands across the DCFP landscape, with or without dwarf mistletoe.

Dwarf Mistletoe Management Recommendations
Minority Report to the DCFP Steering Committee
Chris Johnson, Interfor – October 11, 2011

0-3 21"+ DBH TPA

Cut and remove DM infested trees (overstory and understory). Girdle or otherwise kill DM infested trees that will not pay their way to the landing, i.e., skidding distance too great, and/or located on steep slope. Retain existing snags where they do not pose a safety hazard.

4-14 21"+ DBH TPA

Cut and remove DM infested trees (overstory & understory). Girdle or otherwise kill DM infested trees that will not pay their way to the landing, i.e., skidding distance too great, and/or located on steep slope. Retain existing snags where they do not pose a safety hazard.

Understory development is the most important aspect of this treatment. Putting these stands on a trajectory to become large-tree dominated ponderosa pine stands requires the removal of the infected overstory and understory. This treatment should produce the desired future condition of a ***resilient*** *and* ***healthy*** *stand occupying this site in the long run.*

15+ 21"DBH TPA

Prioritize DM infected trees (understory & overstory) for removal. Thin from below. Girdle or otherwise kill DM infested trees that will not pay their way to the landing, i.e., skidding distance too great, and/or located on steep slope. Retain existing snags where they do not pose a safety hazard.

It appears from maps and tables provided thus far that little or no stands of this type occur within the DM treatment acres. Forest Service proposes a thinning-from-below regime. I interpret this to mean that trees > 21" dbh or with old-growth characteristics may be removed in order to meet residual target densities.

One of the purposes of the Popper Project is to improve forest health. "Retain large, infected overstory trees" within the 15+ 21"+ DBH TPA (Draft Dwarf Mistletoe Reduction and Containment Recommendation) appears counter-productive to this stated purpose.

Northwest Forest Plan Matrix definition: Most timber harvest and other silvicultural activities would be conducted in that portion of the matrix with suitable forest lands, according to standards and guidelines. Most scheduled timber harvest takes place in the matrix.

I have yet to find in the NW Forest Plan S&G's where retention of diseased trees is a stated objective.

Dwarf Mistletoe Management Recommendations
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Page 1 of the CFLR Deschutes proposal states as one of its goals for conducting treatments in stands is "*setting forest structure on a trajectory to develop late-successional stands"*.

Page 1 of the proposal also states, "*The goal for this landscape is to restore forest ecosystems to be **resilient** to natural processes, like fire and insects".* (Emphasis added)

Page 7 of the proposal also states, *Dwarf mistletoe is greater in the current forest than in previous times, and would be addressed by selecting for removal those trees that are heavily and moderately infected*."